



Storm Spotter Training

**National Weather Service
Milwaukee/Sullivan, WI**

www.weather.gov/milwaukee



www.facebook.com/US.NationalWeatherService.Milwaukee.gov



twitter.com/NWSMKX



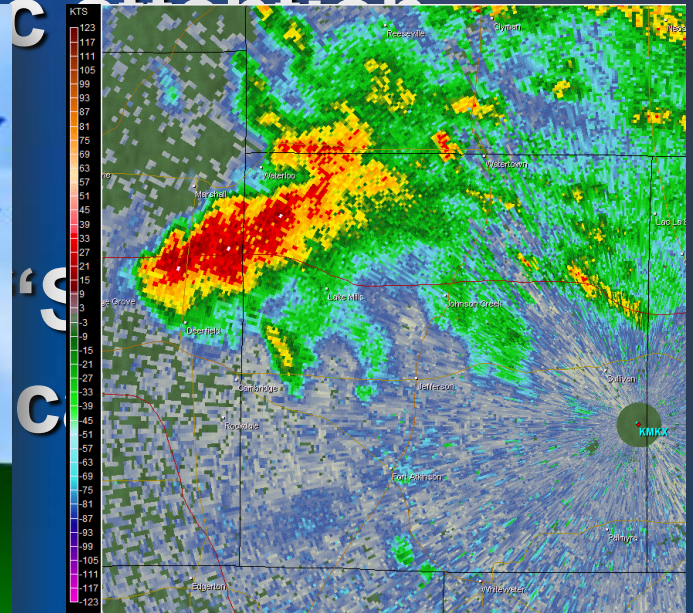
Main Objectives



What do you report?

How do you report it?







What Do You Report?



When = Time

Where = Location

What = Condition

(i.e. what type of event?

Wind, Rain, Fog, Hail, Flood, Tornado)

Hail

Report any size!

**Hailstones ≥ 1 inch generate
Severe Thunderstorm Warnings**

**Use a coin or
ball as a reference size
How long did the hail last?
30 seconds? 5 minutes?**



Hailstone Size	Measurement
Pea	1/4"
Marble	1/2"
Dime	7/10"
Penny	3/4"
Nickel	7/8"
Quarter	1"
Half dollar	1 1/4"
Golf ball	1 3/4"

Thunderstorm Wind Gusts

Report gusts

≥ 40 mph

Tells us about
any damage

Where?

Gusts ≥ 58 mph require
Severe Thunderstorm Warnings

Estimated Wind Speed	Visual Cues
25-31 mph	Large branches in motion
32-38 mph	Whole trees in motion
39-54 mph	Twigs break off, hinders walking
55-72 mph	Large branches broken, damage to chimneys/TV antennas
73-112 mph	Removes shingles, trees uprooted, windows broken
133+ mph	Roofs torn off, weak buildings destroyed, large trees uprooted

Tornadoes



Violently rotating column of air extending from base of convective cloud to the ground

Look for rotating dirt/debris at ground level to confirm a tornado!



What direction is tornado moving? Estimate its location.

Tornadoes do not touch down, they spin up below cloud base

Not all tornadoes have condensation funnels touching ground

Rotating Wall Clouds



Low-hanging cloud at rain-free base of thunderstorm (back side)
Slow, persistent rotation



Can precede a tornado, usually $\frac{1}{2}$ to 3 miles wide
Changes shape, size and color with time

Funnel Clouds



Do not come in contact with the ground or create debris!
They are *a/ways* rotating!



Caution: Scud clouds often resemble funnel clouds. Moving, but without persistent rotation! Often found within rotating wall clouds.

Flooding

Flash Flood = Flooding occurs in less than 6 hours.
Heavy Rainfall = 1+ inch/hour.



How deep is the water?
Water stationary
or moving?

Urban Flooding



**How deep is the water?
Over the curb or
over the bumper?**

Rainfall

Record to the nearest one hundredth of an inch (e.g. 0.01")



*Use a rain gauge!
How much rain
fell in how much
time?
2" rain
Noon to 3 pm*

Snowfall

Report to the nearest tenth of an inch (e.g. 1.2")

Measure in different locations and find the average

Snow depth =
total amount of snow on ground

New snowfall =
amount since snow began to fall.

The NWS measures every 6 hours

Freezing Rain

**Always
report!**

- Report ice accumulations
to nearest tenth of an inch
(i.e. 0.1")**
- Report any damage**



Sleet



Sleet = small ice pellets

Record sleet the same way as snowfall (e.g. 0.1")

FOG

Wisconsin's Deadliest Crash

7:21 AM, 11 Oct 2002

I-43 Southbound

Sheboygan County

(near Ozaukee Co line)

50 Vehicles damaged/destroyed

10 people died

39 injured

Fog reduced visibility



Waterspouts

Rotating column of air extending from cloud base to water surface.



**Always over water! If it moves onshore, becomes a tornado!
Most are much weaker than tornadoes
Report the direction it is moving**

**East of Kenosha
September 12, 2013**

Photo credit: Officer Michael Madsen of the Kenosha Police Department



How Do You Report To Us?



twitter 

facebook 

**Pictures are
always
welcome!**

**Remember,
safety first!
Make sure you
are safe before
reporting!**





One Stop Access!



weather.gov

National Weather Service Weather Forecast Office

Milwaukee/Sullivan, WI

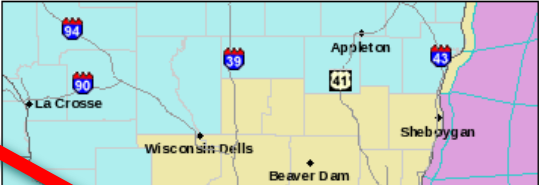
Home Site Map News Organization Search for: ☐ NWS ☐ All NOAA

Top News of the Day **Recently Issued: Storm Report**

- Bitter Cold Wind Chills This Morning (Updated 445 AM 2/27)
- Top 15 Coldest Winter (Updated 7 AM 2/27)
- Number Of 0 °F Or Below Days This Winter (Updated 6 AM 2/27)
- Additional News Headlines

Watches & Warnings Observations Forecast Graphics Rivers & Lakes Climate Marine

Click on the map below for the latest forecast.



Read watches, warnings & advisories

- Gale Warning
- Wind Chill Advisory
- Heavy Freezing Spray

Go to: weather.gov/mkx

Click: **Submit Report**

Choose which way you'd like to send your report to us!

weather.gov

National Weather Service

Home Site Map News Organization Search for: ☐ NWS ☐ All NOAA

Local forecast by "City, St" or Zip Code

City, St

XML RSS Feeds

- Current Hazards
- Watches/Warnings
- Outlooks
- Submit Report**
- Current Conditions
- Observations
- Radar
- Satellite
- Snow Cover
- Snowfall Analysis
- Precip Analysis
- Social Dashboard

MKE SkyWarn Spotter Page

Submit Storm Reports

Your options:

- Use Twitter. We can be reached at "[@NWSMKX](https://twitter.com/NWSMKX)"
- Post it on our Facebook page: <http://www.facebook.com/US.NationalWeatherService.Milwaukee.gov>
- Via our office Form Submission page: Severe Weather Report Form
- Send us an email with your report: w-mkx.webmaster@noaa.gov

Be sure to give us the **TLC: Time/Location/Condition** details in your report.

Tweet us @NWSMKX
<https://twitter.com/NWSMKX>

Can use #swiwx
(Southern Wisconsin Weather)

Make sure you include:
Weather (what), location
(where), and time (when)

**Have confidence in your
report! Unsure? Don't report!**

Pictures are always welcome!





More About



- Take your Twitter report to the next level using:
 - #wxreport and #swiwx
 - Turn on geo-tagging through a 3rd party Twitter application and for your account.
 - If you do not have geo-tagging, submit your location:
 - Your county, city and street intersection
 - OR Your location from the nearest town & county (i.e. 3 SE Sullivan, Jefferson County)
 - Lat/lon in degrees and decimal degrees





Example Tweets



- **Severe Weather:**

**@nwsmkx 714PM Brookfield Waukesha cnty 1" Hail
#swiwx**

**@nwsmkx 820PM 2NW Wales Waukesha cnty
TORNADO movg E #swiwx**

**@nwsmkx 910PM Madison Dane cnty M65mph wind
gust #swiwx**



**@nwsmkx 1035 PM Jefferson Heavy rain, M1.50 in 1
hr #swiwx**



← → ↺ <https://www.facebook.com/US.NationalWeatherService.Milwaukee.gov> 🔍 ☆

f US National Weather Service Milwaukee/Sullivan Wisconsin 🔍

Home



US National Weather Service Milwaukee/Sullivan Wisconsin

7,711 likes · 1,994 talking about this

Government Organization
Facebook posts do not always reflect the most current information. For current official info, visit:
<http://www.crh.noaa.gov/mkx>

About · Suggest an Edit

Enter report here, then click Post

Post Photo / Video

Post something on this Page...

Highlights

Recent Posts by Others

Laura Elizabeth
Is it really necessary to issue a severe weather alert at 3:30...
3 · 4 hours ago

Chris Kaye
Yowzah. Returned home this evening to find our weather ...
1 · February 21 at 6:31pm

William Rasmussen
"WE COULD STILL SEE SOME LIGHT SNOW OR FLURRI...
1 · February 21 at 10:02am

Carlos Munoz
It seems obvious but.. tips on driving a car in winter: ht...
February 20 at 10:45pm

Record low temps possible tonight
Record low maximum temps possible Thursday

We are forecasting a new record low of -10F at Madison tonight, while Milwaukee will fall just short of their record of -6F.

Post on our page:
<https://www.facebook.com/US.NationalWeatherService.Milwaukee.gov>

Include:
Weather (what), location (where), and time (when)

Have confidence in your report!
Unsure? Don't report!

Pictures are always welcome!





Other Ways To Report



- E-mail: w-mkx.webmaster@noaa.gov
- Dial 911 to contact law enforcement
- They can relay your report to us
 - (Use **only** for tornadoes, flash flooding, major wind damage)



Want To Learn More?

- MetEd Website SKYWARN® Spotter Training
 - https://www.meted.ucar.edu/training_course.php?id=23

The screenshot shows the MetEd website interface. At the top, the 'MetEd' logo is on the left, and navigation links 'Sign Up', 'Have an account?', 'Sign In', and 'Donate' are on the right. The 'Sign Up' button is circled in red. Below the header is a navigation bar with links: HOME, EDUCATION & TRAINING, COMMUNITIES, RESOURCES, ABOUT, and MY METED. The main content area is titled 'Course Listing » Course Description'. It features a search bar and a 'Search' button. The course 'SKYWARN® Spotter Training' is highlighted with a thumbnail image. To the right of the thumbnail, it lists 'Languages: English', 'Completion Time: 2 hrs', and 'Topics: Convective Weather, Other'. An 'Enroll' button is below this. Further right, an 'Average Score' box shows 'N/A'. Below the course title are tabs for 'Description', 'Objectives', 'Overview', and 'Additional Resources'. The 'Description' tab is active, showing a paragraph about the course. On the right side of the page, there is a 'What is a Course?' section, a 'Support Form' section with a 'Go' button, and a 'MetEd Use FAQ' link.

- Weather Spotter's Field Guide:
 - <http://www.nws.noaa.gov/om/brochures/SGJune6-11.pdf>



The End



Questions?

